

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A metal component for fuel cell, to be disposed in contact with a main cell unit comprising a polymer electrolyte film and a pair of electrodes holding it in between,

configured as having a plate-formed metal base composed of a metal less noble than Au, and an Au film formed on a the main surface thereof, wherein having the metal base is provided with a cutting plane, formed as wherein an end face stretched up is formed by the cutting plane such that the Au film is extended along the end face so as to cover part of the end face to said main surface, the endface the cutting plane having a region of 1 mm or less in width having said where the metal base is exposedexposes therein.

2. (currently amended): A metal component for fuel cell, to be disposed in contact with a main cell unit comprising a polymer electrolyte film and a pair of electrodes holding it in between,

configured as having an Au film formed on the main surface of a plate-formed metal base composed of a metal less noble than Au, and said metal base being cut along a planned cutting line forming reflecting a contour of said component, wherein an end face formed by the cutting process has a region of 1 mm or less in width were the metal base is exposed.

3. (previously presented): The metal component for fuel cell as claimed in Claim 1, wherein said electrode has a plate form and is in contact with said polymer electrolyte film on a first main surface thereof, and said metal component is composed as a separator disposed in contact with said electrode on a second main surface thereof, having a regular rough on the main surface opposing to said electrode, projected portions of said regular rough being brought into contact with said electrode, and recessed portions of said regular rough serving as a gas flow path through which a fuel gas or an oxidizer gas is supplied to said electrode.

4-5. (canceled).

6-11. (canceled).

12. (withdrawn): An austenitic stainless steel for polymer electrolyte fuel cell, consisting essentially of, in % by weight (same will apply hereinafter), Cu: 0.10-6.00%, Ni:6.00-13.00%, Cr: 16.00-20.00%, N: 0.005-0.30%, Si: 1.00% or less, Mn: 1.00% or less, and the balance of Fe and inevitable impurities.

13. (withdrawn): An austenitic stainless steel for polymer electrolyte fuel cell, consisting essentially of Cu: 0.10-6.00%, Ni:6.00-13.00%, Cr: 16.00-20.00%, Mo: 0.10-4.00%, N: 0.005-0.30%, Si: 1.00% or less, Mn: 1.00% or less, and the balance of Fe and inevitable impurities.

14. (withdrawn): An austenitic stainless steel for polymer electrolyte fuel cell, consisting essentially of Cu: 0.10-6.00%, Ni:10.00-15.00%, Cr: 16.00-18.50%, Mo: 1.00-4.00%, N: 0.005-0.30%, Si: 1.00% or less, Mn: 1.00% or less, and the balance of Fe and inevitable impurities.

15. (withdrawn): An austenitic stainless steel for polymer electrolyte fuel cell, consisting essentially of Cu: 0.10-6.00%, Ni:6.00-13.00%, Cr: 16.00-20.00% and N: 0.005-0.30%, and also of C: less than 0.02%, Si: 1.00% or less, Mn: 1.00% or less, P: 0.030% or less and S: 0.005% or less, satisfying a relation of $250 \times [C\%] + 5 \times [Mn\%] + 25 \times [P\%] + 200 \times [S\%] < 10$, and the balance of Fe and inevitable impurities.

16. (withdrawn): An austenitic stainless steel for polymer electrolyte fuel cell, consisting essentially of Cu: 0.10-6.00%, Ni:6.00-13.00%, Cr: 16.00-20.00%, Mo: 0.10-4.00% and N: 0.005-0.30%, and also of C: less than 0.02%, Si: 1.00% or less, Mn: 1.00% or less, P: 0.030% or less and S: 0.005% or less, satisfying a relation of $250 \times [C\%] + 5 \times [Mn\%] + 25 \times [P\%] + 200 \times [S\%] < 10$, and the balance of Fe and inevitable impurities.

17. (withdrawn): An austenitic stainless steel for polymer electrolyte fuel cell, consisting essentially of Cu: 0.10-6.00%, Ni:10.00-15.00%, Cr: 16.00-18.50%, Mo: 1.00-4.00% and N: 0.005-0.30%, and also of C: less than 0.02%, Si: 1.00% or less, Mn: 1.00% or less, P: 0.030% or less and S: 0.005% or less, satisfying a relation of $250 \times [C\%] + 5 \times [Mn\%] + 25 \times [P\%] + 200 \times [S\%] < 10$, and the balance of Fe and inevitable impurities.

18-21. (canceled).

22. (original): A polymer electrolyte fuel cell material comprising a plate material composed of an Fe-base alloy, Ni-base alloy, Ti or Ti-base alloy, and a cover film of a noble metal covering the surface thereof, wherein the cover film on the plate material has a surface roughness as expressed in R_{max} of 1.5 μm or less.

23. (previously presented): The polymer electrolyte fuel cell material as claimed in Claim 22, wherein said cell material shows, in a metal ion release test, an amount of Fe ion elution of 0.15 mg/0.4 liter or less, and an amount of Ni ion elution of 0.01 mg/0.4 liter or less.

24-26. (canceled).

27. (previously presented): A metal component for fuel cell configured by using the polymer electrolyte fuel cell material as claimed in Claim 22, and to be disposed in contact with a main cell unit comprising a polymer electrolyte film as an electrolyte and a pair of electrodes holding it in between.

28. (original): The metal component for fuel cell as claimed in Claim 27, wherein said electrode has a plate form and is in contact with said polymer electrolyte film on a first main surface thereof, and said metal component is composed as a separator disposed in contact with said electrode on a second main surface thereof, having a regular rough on the main surface opposing to said electrode, projected portions of said regular rough being brought into contact

with said electrode, and recessed portions of said regular rough serving as a gas flow path through which a fuel gas or an oxidizer gas is supplied to said electrode.

29. (canceled).

30. (original): A corrosion-resistant conductive component comprising a metal base and a noble metal film of 100 nm thick or less formed on at least a part of the surface of said metal component, said noble metal layer and an intermediate layer formed between said base and said noble metal layer having impurity contents of C: 1.5% or less, P: 1.5% or less, O: 1.5% or less and S: 1.5% or less, and being restricted to C+P+O+S: 4.0% or less.

31. (previously presented): The corrosion-resistant conductive component as claimed in Claim 30, wherein said metal base is a stainless steel.

32. (original): The corrosion-resistant conductive component as claimed in Claim 31, wherein said stainless steel is an austenitic stainless steel.

33. (original): The corrosion-resistant conductive component as claimed in Claim 32, wherein said noble metal layer and said intermediate layer have a maximum Cr/Fe ratio of 3 or less, and a maximum Ni/Fe ratio of 2 or less.

34. (original): The corrosion-resistant conductive material as claimed in Claim 30, wherein a noble metal composing said noble metal film is any one element selected from Au, Pt, Pd, Rh and Ru, mixtures of these elements, and alloys mainly composed of these elements.

35. (canceled).

36. (previously presented): The corrosion-resistant conductive component as claimed in Claim 30, being configured as a metal separator for fuel cell.

37. (canceled).

38. (previously presented): The metal component for fuel cell as claimed in Claim 2, wherein said electrode has a plate form and is in contact with said polymer electrolyte film on a first main surface thereof, and said metal component is composed as a separator disposed in contact with said electrode on a second main surface thereof, having a regular rough on the main surface opposing to said electrode, projected portions of said regular rough being brought into contact with said electrode, and recessed portions of said regular rough serving as a gas flow path through which a fuel gas or an oxidizer gas is supplied to said electrode.

39. (previously presented): A metal component for fuel cell configured by using the polymer electrolyte fuel cell material as claimed in Claim 23, and to be disposed in contact with a main cell unit comprising a polymer electrolyte film as an electrolyte and a pair of electrodes holding it in between.